



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS OKLAHOMA CITY AIR LOGISTICS CENTER (AFMC)
TINKER AIR FORCE BASE, OKLAHOMA

MEMORANDUM FOR THE COMMUNITY ADVISORY BOARD

FROM: OC-ALC/EM

7701 Arnold Street Suite 204
Tinker AFB OK 73145-9100

SUBJECT: Community Advisory Board (CAB) Meeting Minutes

1. Location: Midwest City Public Library, Room A
2. Date/Time: 30 October 2001, 6:00 p.m.
3. Members Present:
 - Ms. Vicki Preacher, Director, (EM), Tinker Air Force Base
 - Mr. Bill Janacek, City of Midwest City
 - Ms. Susie Beasley, Midwest City Public Library
 - Ms. Rita Douglas Talley, Assistant Municipal Counselor, City of Oklahoma City
(For Ms. Betty Reaties)
 - Mr. Richard Reginald, Waste Management of Oklahoma
 - Mr. Hal Cantwell, Oklahoma Department of Environmental Quality (ODEQ)
 - Mr. Earl Hatley, Oklahoma Toxics Campaign
 - Mr. Chris Villareal, United States Environmental Protection Agency (USEPA)
(For Mr. Ruben Moya)

Members Absent:

Mr. Ruben Moya, United States Environmental Protection Agency (USEPA)
Mr. Bill Stallings, Rose State College
Ms. Kathy Lippert, Applied Geoscience Environmental Services Inc.
Mr. Jim DePuy, City of Del City
Mr. James T. Edwards, City of Choctaw
Ms. Betty A. Reaties, City of Oklahoma City
Mr. John Harrington, Association of Central Oklahoma Governments (ACOG)

Other Attendees:

Ms. Cathy Scheirman, (EM), Tinker Air Force Base
Ms. Susan Cody, (EM), Tinker Air Force
Mr. Joseph Ceerle, (EM), Tinker Air Force Base
Mr. Brion Ockenfels, Public Affairs (PA), Tinker Air Force Base
Ms. Barbara Brantner, (EM), Tinker Air Force Base
Ms. Diana Cramer, (EM) Tinker Air Force Base
Mr. Tim Forrest, Judge Advocate (JAV)

Mr. Fred Krapff, Krapff Reynolds Construction Company
Mr. Jerry Black, Black & Associates
Ms. Mary Jane Calvey, (ODEQ)
Mr. Mel McFarland, (JAV)
Ms. Linda Caine, (ODEQ)
Mr. Mark Ritchie, Coon Engineering
Mr. Keith Buehler, (EMR), TAFB
Mr. James Heisler, Citizen
Mr. & Mrs. Rowe, Citizen
Ms. Suzann Bagwell, Citizen
Mr. & Mrs. Snapp, Citizens
Mr. Barry Talley, Citizen
Mr. Gary Ball, Citizen
Mr. James Mosley, Citizen
Ms. Dana G. Jim, Citizen
Mr. Adhir Agrawal, City of Oklahoma City

4. Ms. Preacher called the meeting to order. Ms. Preacher introduced herself as the new Director of Environmental Management. Ms. Preacher opened the meeting with a brief review of the CAB's history for any new visitors. She explained that the board was formed many years ago at Tinker AFB and that the meetings are held quarterly and Public Notices are put in all the local papers to notify the public of the upcoming meetings. The board's purpose is to promote community awareness and obtain constructive community review and comment on environmental actions at Tinker AFB. Ms. Preacher stated the board's agenda would be followed and asked that questions be held until the open discussion portion of the meeting and requested that any persons wishing to address the board state their name and address before posing their question.

5. **Approval of Minutes:** Minutes from the 17 July 2001 meeting were approved.

6. Old Business:

a. **Executive Committee:** Mr. Janacek reported that the committee met 10 October 2001 at 10:00 A.M. After a lengthy discussion, the agenda for the 30 Oct CAB meeting was developed. Ms. Preacher said there was an issue that came up at the last meeting in reference to groundwater flow and Cathy Schierman will be addressing this issue. Ms. Scheirman stated that at the last meeting the question was asked, "In 1986, some residents said that there had been something going on on base that was causing vibrations at their house and they thought it was some type of dynamite. They called the base and Tinker said they were diverting the flow of groundwater."

Ms. Scheirman said she had worked at Tinker since 1981 and had no recollection of any projects that involved diverting the groundwater. So she went back to the base and asked various organizations, which do these type projects on base, if they knew of the cause. They had no knowledge of any dynamiting that was used to divert the flow of water. She

also spoke with some retired personnel and they had no recollection as well. Nothing can be found to support this claim. If you know anyone that might have additional information, please let us know so we can continue to investigate if necessary.

b. Technical Committee: Ms. Lippert was not available, but Mr. Janacek volunteered to give an impromptu summary of meeting. One issue raised was sampling protocol and the Quality Assurance Quality Control (QAQC) plans that were being used at the Department of Environmental Quality (DEQ) on the sample regime for this area. Within two days of the last meeting, DEQ provided Mr. Janacek with a lengthy document. The QAQC plan is by the book and the sampling regime follows public water supply sampling. There is no separate document for sampling private water supplies. One question brought up was that you needed to evacuate the well casing 2 or 3 times to make sure it's recharged. The concern was the drinking water and that protocol only pertains to test wells. The recharge process described does not pertain to tap water. Mr. Hatley will be going over the DEQ protocol more in depth. Mr. Janacek said that DEQ was very forthcoming in their report and their QAQC on their gas chromatography analysis is exactly what it needs to be.

c. Community Relations: Ms. Beasley stated that the Community Relations Committee met in August. The committee members went over the Community Relations Plan and submitted corrections to Environmental Management to be included in its update. The next meeting is planned for November, but no date has been set as yet.

7. New Business:

a. Private Water Well Sampling/Analysis Protocol Review: Mr. Hatley explained that as a result of the question raised at the last meeting, that the Technical Committee did further research. The Technical Committee got together after gathering all information they could find on trichloroethylene (TCE) and 1, 2 Dichloroethane (DCA). The committee worked up a 2-page fact sheet, which was available at the meeting. Mr. Hatley let the audience know that if they have any questions after the material is presented they could call him or Mr. Janacek.

1) Report of Findings: Mr. Hatley first talked about the pathways of exposure. The possible pathways are inhalation, ingestion and absorption. Inhalation and absorption can occur during showering, watering of plants and skin absorption. The chemicals volatilize into the air, so if you're standing in a shower or holding a hose watering your plants, any contaminants in the water would volatilize (not all, but some). How much is unknown depending on the conditions. Levels found in the groundwater are so low that the amount, which would volatilize into the air or absorbed through the skin, poses little or no risk. Mr. Hatley said there are three categories of minimal risk levels (MRL's) and those are acute, intermediate and chronic. Findings for TCE for acute inhalation category is (1-14 days) an exposure high enough that being exposed to a chemical during that period would cause adverse health effects. The levels for TCE are 200 parts per billion (ppb), keeping in mind that the highest level found was 13.7 ppb in one well and the other three were well below the EPA Drinking Water Standard of 5 ppb. With the level being this low, it's unlikely you'll have health effects from this type of exposure. The chronic, which is long term, low level exposure for 365 days of continuous exposure is 40 ppb. With DCA, all that

was found was the chronic inhalation rate, which is the most important in this case because we're dealing with low-levels of DCA and the chronic inhalation is 600 ppb. The highest level found was 17 ppb out of six houses, the rest being detects and well below the EPA drinking standard of 5 ppb. So the one well is not of any concern since it is not even remotely close to the standard of 600 ppb regarding chronic inhalation. Next exposure concern is drinking water and actually ingesting the contaminants. The Agency for Toxic Substances and Disease Registry (ATSDR) does not have a standard for that except on the acute level, which for both contaminants is 2 milligrams per kilogram per day. There's no chronic and again these are low levels and there is no established chronic MRL for these contaminants. So we revert to the EPA standard of 5 ppb. The Technical Committee in looking at this data concurred that there are two wells that tested above 5 ppb for each of the contaminants. Therefore, drinking water is the risk to the family with the contaminants that are identified in their wells.

2) **Recommendations:** The committee came up with these recommendations based on their findings. All wells showing any detection of contaminants should be closed and cased. This is because of the drinking water exposure. The question of other types of uses like showering and watering plants, we believe to be safe, but at your own risk. Knowing that these are low-levels and seeing the data, you can see for yourself that it's a minimal risk. So that activity may be all right if you choose to engage in it. The committee believes that all residents should use the water provided by Tinker and they should work to close their drinking water wells in the area. Closing the drinking water wells are for two reasons, health and property values. Private wells that do not show contamination now, should be tested at least once per year. All residents should consider hooking up to Oklahoma City water supply. Closed and cased wells should not cause your home to be devalued because of the groundwater contamination. There's no rational here because it poses no threat to someone buying the property. A little bit of contamination in the groundwater below the surface, with no route of exposure to the resident, would not trigger a class 2 environmental assessment. Therefore, it should have no effect on property values. However, a property with a water well that may not be contaminated but in an area where you have contaminated groundwater could potentially be a problem, but since we're not experts in the matter, we can't be sure. Stay in contact with the CAB in order to acquire the most up-to-date information and latest findings on this matter. This report is only on the private wells. Tinker is coming out with a report on the monitoring wells, which are different than the private water wells. It was pointed out by Mr. Janacek, that it was brought up at the last meeting that Resource Conservation and Recovery Act (RCRA) protocols were not utilized when sampling the tap water in the residential area. The Resource Conservation and Recovery Act (RCRA) protocols are for monitoring wells and it's a technical procedure for monitoring groundwater in specific ways using these types of wells. Sampling tap water for a health risk consists of a different methodology. Mr. Janacek looked at the protocol for doing that and determined that the procedure of running the tap water for 5 minutes before taking samples was an accurate way of sampling the tap water.

b. **Tinker View Acres Neighborhood Update:** Mr. Cecrle began his presentation by reviewing some of the information from the July meeting. Mr. Cecrle pointed to the various wells on the slide of Tinker View Acres and explained which ones were contaminated and

with what. Since the last CAB meeting, Department of Environmental Quality (DEQ) has sampled on six different occasions and confirmed the earlier results. Mr. Cecrle stated residents that paid for their sampling after August 23, 2000, but before DEQ sampling, were entitled to reimbursement. Currently, no one has requested this so Mr. Cecrle wanted to reiterate this statement. It was further stated that the connection to city water will be at no cost to the residents and that this is the only remedy to contaminated well water that is being offered by Tinker at this time. The design was finished late last month and the contract was awarded to Krapff Reynolds Construction Company. They started work on October 29, 2001, and as soon as there is a schedule available it will be posted to the Tinker website. We'll be keeping that updated so residents can follow the progress and timetable for completion. Mr. Cecrle reiterated that whether or not your well is contaminated, you could receive the bottled water. Only 20 people have taken advantage of this and this will continue to be offered at no cost to you until your home has either been hooked up to Oklahoma City water supply or that time has past that you would have had city water. Mr. Cecrle said that anyone having trouble reaching the website to please e-mail him for help. The website is <http://www-ext.tinker.af.mil/EM/TVA/tva.htm>. Please provide us with feedback or any information you would like to see posted on the website. If you did not receive the last mail-out newsletter, please see us after the meeting and provide us with your mailing address so we can add you to our list. It was pointed out that Fred Krapff (Krapff Reynolds Construction) and Adhir Agrawal (Senior Civil Engineer OKC) were present for questions during and after the meeting. Mr. Cecrle spoke next about the preliminary findings for the southwest quadrant. He explained that there are 7 monitoring wells in the Tinker View Acres neighborhood and pointed out their location on the map that was provided. He told the audience that the Resource Conservation and Recovery Act Final Investigation (RFI) draft will be completed in December 2001 and will be available to the public early next year (2002). This report will describe where all the contamination is and what it is in greater detail. Next will be the Corrective Measures Study (CMS), which is due to be completed in June 2002. This report will lay out the plan to correct the ground contamination. Once the plan has been formalized, Tinker will make a formal record of their decision, obtain EPA sign-off, and then the public will have input at that point. Mr. Cecrle reiterated that if Tinker View Acres has any questions or concerns now, that it should be brought to our attention, so it can be incorporated in the decision making process now rather than after the reports are finalized.

c. Environmental Restoration Project Update: Mr. Buehler gave a report on four current projects that are going on at Tinker. One is the Industrial Waste Pit #1 (WP018) removal, located at the southeast corner of the base. Excavation will commence in November 2001 and is expected to be completed by April 2002. Soil will be removed and treated before disposal. The Sanitary Treatment Plant (STP) demolition is underway and should be completed in December 2001. Our newest project is the Engine Test Cell VEP (Vapor Enhanced Pumping) System, located on the east side of the base. This is scheduled to commence in November 2001. The last project is the Northwest Groundwater Unit (CG37). The RFI study is due to be completed in December 2001 and the Corrective Measure Study (CMS) to commence in January 2002.

d. **CAB Charter Update:** Ms. Preacher said the next item was the signing of the updated CAB Charter. This is required due to changes in CAB members. Each CAB member should review the charter and sign before leaving. The motion was made seconded and passed.

e. **Proposed Schedule for CAB Meetings in 2002:** The proposed schedule for 2002 was passed out and approved.

8. Open Discussion:

Dean Snapp wanted everyone to know that he thinks Tinker is doing an excellent job and making every effort to find solutions for the groundwater contamination. His next comments were directed at the construction company. He had spoken to the construction crew at the excavation site and had concerns about the piles of dirt that are causing obstructions in the line of sight for traffic in the area. Area does not have enough light in and around the barricade for night traffic to see if a child or adult steps out. Mr. Snapp said there has always been a problem with speeding traffic coming from the other sub-divisions through Tinker View Acres. He's asked the city to add more enforcement to the area on several occasions, as well as stop signs. Mr. Janacek asked the city representative Mr. Agrawal to investigate increasing patrols during rush hour traffic. Mr. Snapp is concerned that if this is not resolved, someone is going to get hurt. Mr. Krapff said he would ensure that the area has blinking lights at night and no dirt is left in the street at night.

Gary Ball said he has lived in Tinker View Acres since 1976 and knows that there is only one Patrol Officer per duty shift, which is also responsible for the Choctaw area as well. He's requested the Planning Commission to please install a temporary barricade for Frolich Meadows that states, "No through traffic", to cut down on the amount of traffic that passes through their area everyday. Mr. Agrawal said he would ask the Traffic Commission to look into this matter. The request is just until the construction is over. He also brought up that he has some concerns about converting to city water. He has very strong chlorine sensitivity and would like some help on alternative measures to screen out the chlorine. Mr. Hatley and Mr. Janacek suggested installing a charcoal filter on his house or just in the bathroom where he showers in order to filter out the chlorine. Mr. Albrecht wanted to know who would pay for the installation of this filter. The CAB will investigate alternatives for Mr. Ball.

Angela Rowe wanted the committee to know that she is very happy with the response she's received from Mr. Buehler in regards to her questions. She wanted to know if city sewer lines could be installed at the same time as the water line installation. The Oklahoma City Water Utilities representative agreed to investigate whether or not there are any plans to run sewer to Tinker View Acres and would provide a point of contact for the residents to follow up.

Jerry Black stated that he is a representative of the people and wants to ensure that the methodology being used is correct for checking the groundwater. He asked the board if he could receive further information in regards to the reports and Ms. Preacher said they would be available to the public on the Tinker website soon. He offered his experience and expertise in assisting Tinker with their investigation. Mr. Janacek told him his help would be most welcome.

Susan Bagwell raised questions again in regards to capping the wells. She asked who would pay for the capping and why is the CAB now recommending capping all wells, when they stated at the last meeting the residents could continue to use their wells. The CAB suggested that the only way to ensure their health and safety was to convert to city water, but no one is telling them that they have to close their wells. Tinker explained this was a recommendation by the community members of the CAB and until the RCRA Facility Investigation (RFI) was done, Tinker could not make an official recommendation on capping wells. EM will explore various avenues for funding, if the RFI supports capping the wells. Ms. Bagwell also asked if the wells would continue to be monitored even after city water is installed. Mr. Cecrle stated that private wells will be checked once a year and monitoring wells will continue to be monitored.

Chris Albrecht does not want city water. He mentioned that he called three different lending institutions and they have all said that they would not fund a new loan on these properties with the documented contamination. Mr. Cecrle said that if you don't have a contaminated well, then the contamination doesn't exist. There is a big distinction between having a home on a contaminated landfill site versus an existing contamination in groundwater that doesn't exist anywhere else. Furthermore, if you hook up to the Oklahoma City water supply, the contamination should no longer be a concern. Other residents expressed concern about their property value going down because of the groundwater contamination.

Lisa Ezell wanted to correct the DEQ results on her well being 19 ppb vice 17 ppb. Mr. Janacek said that when the Technical Committee met, the new data was not available. She asked Mr. Cecrle about the wells being dug deeper to go beyond the level of contamination. She felt that Tinker was telling the residents it was their problem and they would have to incur the expense on their own. She asked if Tinker was aware of where the contamination originated and Mr. Cecrle stated that the preliminary investigation showed that it came from a landfill site that was from the late 40's and early 50's some distance from Tinker View Acres. Ms. Ezell was concerned about the affidavit that she has to sign from Coon Engineering stating that she will maintain and replace plumbing whenever it becomes necessary. Her concern is that the plumbing is 50 years old and if she hooks up to city water, what will happen to the plumbing with the increased pressure on the lines. Mr. Krapff stated that they are installing pressure reducers on all the lines and the residents will be able to adjust them to suit their needs. Mr. McFarland commented that Krapff Reynolds Construction has a one-year bond that covers maintenance of the installed water lines at the street. Residents are concerned about potential flooding if there is a severe break due to increased pressure. Mr. Krapff stated that the pressure reducer factory default is set at 35 psi and that's how they would be installed. Typical well pressure tanks are set from 40 – 65 psi and the residents would have to increase the pressure themselves if 35 psi is not enough. Ms. Ezell also asked about contamination effect on pets. Mr. Hatley said he found only one study on effects of DCE on plants, but did not do a search on animals. Ms. Ezell asked if she could provide the CAB with information on pets and Mr. Janacek said the board would welcome any information she could provide. Ms. Ezell asked Mr. Hatley if the contamination would have a varied affect on different people depending on age, size and health. Mr. Hatley responded that the results in the findings may or may not apply the same to all residents with contamination of well water due to other variables involved.

Karen Albrecht asked if based on the final reports would there be a means of cleaning the water or providing corrective measures to clean the water. Mr. Cecrle said the corrective measure study evaluates a set of alternatives that can be used and we're employing one of these now by pumping out the water on a continuous basis and treating the groundwater. There are other types of technologies available that will be studied and evaluated as to whether or not they will work at this site and how well they will work. Tinker will then make a decision on what will work best at this site. He stated that this is a long term clean up when you're talking about groundwater vice soil that can be removed from an area.

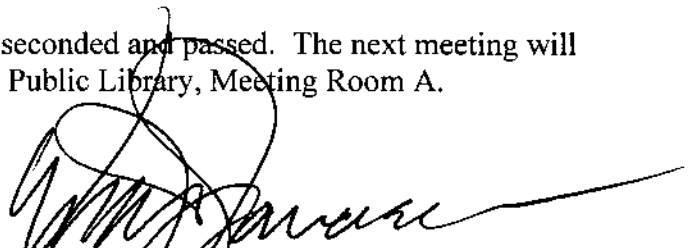
Mr. Agrawal from the Oklahoma City Water Utilities asked at this time if all the residents present at this meeting would ask their neighbors to please send in their affidavits for temporary easement as soon as possible. Without these forms, the city cannot install the plumbing for city water.

Barry Talley said he thought he understood from the last meeting that he wasn't going to incur any additional cost other than future utility costs and that as long as his well did not co-mingle with the city line, he could maintain his well for watering and things other than drinking and showering. He also had concerns about the contract from the city that said, "He would not hold the city harmless from any damage to his property." He also wondered if this applied to the construction company as well. Mr. Hatley told him that it's the residents call on whether or not to cap their wells, but the committee feels it would be safer not to use the wells at all based on the groundwater contaminates. Mr. Agrawal addressed the clause that talked about holding the city harmless and said he would go back to his legal staff and get clarification on its intent. Mr. Stamp asked if the contractor would get with the individual home owners to determine the best way to tie into their property. Mr. Agrawal said they would.

9. Motion was made for adjournment; motion was seconded and passed. The next meeting will be January 15, 2002, 6:00 p.m. at the Midwest City Public Library, Meeting Room A.



VICKI L. PREACHER
Tinker AFB Co-Chair



WILLIAM JANACEK
Community Co-Chair